REMARKS

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The position of the Office is that the expression of number density as an integer divided by mass requires correction.

Claim 1 has been amended to recite "wherein the number ~~density~~ of titanium-containing particles, the equivalent circular diameter of which is 1 μm or more, is less than 100/0.02 mg of the composition." The amendment is supported in the specification of the present application *inter alia* by the description on page 36, lines 16 to 19.

Removal of the 35 U.S.C. 112, second paragraph, rejection of claim 1 is believed to be in order and is respectfully requested.

Claims 1 to 5, 8 to 11, 13 to 15 and 16 to 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoyama et al. (U.S. Patent No. 6,365,659; hereinafter "Aoyama"). The Office cites Aoyama as disclosing a polyester composition comprising 3 to 50 ppm of titanium oxide, and phosphorous in an amount of 3 to 100 ppm, wherein particles may have equivalent circular diameter more than 1 μm and titanium particles are used as a polymerization catalyst and can be present as a complex oxide with silicon. (page 3, lines 3 to 9, of the Action).

Applicants respectfully submit that Aoyama fails to disclose each and every limitation of the polyester resin composition of claim 1 of the present application. As a result, the 35 U.S.C. 102(b) rejection of the claims must fail.

In its statement of rejection, the Office has not identified a disclosure in Aoyama that meets the limitation that the number density of titanium-containing particles, the equivalent circular diameter of which is 1 μm or more, is less than 100/0.02 mg, i.e., that the number of titanium-containing particles, the equivalent circular diameter of which is 1 μm or more, is less than 100/0.02 mg of the composition, as now precisely recited in claim 1 of the present application. (For convenience is discussing the prior art grounds of rejection, this limitation will be hereinafter referred to simply as "the number density of titanium-containing particles of less than 100/0.02 mg"). Also, the Office has not suggested and has not shown that this limitation is inherently met by the composition of Aoyama.

Applicants respectfully submit that the composition of Aoyama does not have a number density of titanium-containing particles of less than 100/0.02 mg. This is because, in Aoyama, it is essential to add titanium-containing compound oxide particles, but the compound oxide becomes a slurry as described in Example 1 of Aoyama

(Col. 14, line 29). On the contrary, since the titanium catalyst used in the present application is a solution, not a slurry, it is possible to achieve a number density of titanium-containing particles of less than 100/0.02 mg.

For reference, the number density of titanium-containing particles, the equivalent circular diameter of which is 1 μm or more of each of the polyester resins produced in Examples 1, 4-11, 13 and 14 of Aoyama was measured according to the measuring method used in the examples of the present application (see page 62, line 11, to page 64, line 16). The measured numbers of particles are shown in the attached Table 1. None of the measured numbers of particles meet the limitation of a number density of titanium-containing particles, the equivalent circular diameter of which is 1 μm or more, is less than 100/0.02 mg.

Further, the polyester resins Examples 1, 4-11, 13 and 14 of Aoyama were formed into films based on Example 1 (Formation of polyester film) of the present application, and the numbers of dropouts were counted based on the measuring method of the present application. None of the counted numbers of dropouts was found acceptable.

Furthermore, attached Table 1 also shows the numbers of particles of the same polyester resins as those of Aoyama except

that neither titanium dioxide particles nor silicon oxide particles were added, and the numbers of dropouts of the films formed using those polyester resins not containing the particles. In this case, none of the measured numbers of particles corresponding to Example 1, 4-11, 13 and 14 of the cited document 1 satisfied that "the number density of titanium-containing particles, the equivalent circular diameter of which is 1 μm or more, is less than 100/0.02 mg," and none of the counted numbers of dropouts was found acceptable.

Removal of the 35 U.S.C. 102(b) rejection of the claims is believed to be in order and is respectfully requested.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama as applied to claims 1-5, 8-11, 13-15 and 16-18, in view of Naylor et al. (WO 97/47675). Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama as applied to claims 1-5, 8-11, 13-15 and 16-18, and in view of Kato et al. (U.S. Patent No. 6,680,353). Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama as applied to claims 1-5, 8-11, 13-15 and 16-18, and in view of Uchida et al. (U.S. Patent No. 6,670,030).

Each of the rejections of claims 6, 7, 12 and 19, which depend directly or indirectly from claim 1, depends on the 35 U.S.C.

102(b) rejection of claim 1 based on Aoyama. Since claim 1 has been shown to be patentable, claims 6, 7, 12 and 19 are patentable as well.

Furthermore, none of the secondary references cited in the rejections overcome the failure of Aoyama to teach a number density of titanium-containing particles of than 100/0.02 mg.

Removal of the 35 U.S.C. 103(a) rejections of the claims is also believed to be in order and is respectfully requested.

The foregoing is believed to be a complete and proper response to the Office Action dated June 1, 2007, and is believed to place this application in condition for allowance.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of time. The fee for any such extension and any other required fees may be charged to Deposit Account No. 111833.

Respectfully submitted,
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Attachment: Table 1

Table 1 Test Results of Examples of US6365659

	Particles (X)			Compound oxide (A)		Phosphorus compound (B)		Alkaline earth metal or cobalt compound (C)		Polyester resin properties	Film properties	Particles (X) not added	
	Compound	Average particle size (μm)	Content (wt%)	Ti/Si (molar ratio)	Content as titanium atoms (ppm)	Content as phosphorus atoms (ppm)	Ti/P (molar ratio)	Metal (content as metal atoms) (ppm)	Ti/metal (molar ratio)	Number of particles (pcs/0.02 mg)	Number of dropouts (accepted or rejected/quantity)	Polyester resin properties: Number of particles (pcs/0.02 mg)	Film properties: Number of dropouts (accepted or rejected/quantity
Example 1	Titanium dioxide	0.56	0.5	90/10	15	30	0.32	Cobalt (47)	0.39	>300	Rejected/60	>300	Rejected/35
Example 4	Titanium dioxide	0.56	0.5	95/5	15	1.5	6.5	Cobalt (47)	0.39	>300	Rejected/63	>300	Rejected/43
Example 5	Titanium dioxide	0.56	0.5	80/20	20	32	0.4	Cobalt (120)	0.2	>300	Rejected/62	>300	Rejected 40
Example 6	Titanium dioxide	0.56	2.5	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected /82	>300	Rejected 47
Example 7	Titanium dioxide	0.56	0.01	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected /83	>300	Rejected/47
Example 8	Silicon oxide	0.32	1	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected/51	>300	Rejected/47
Example 9	Silicon oxide	0.25	0.5	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected/50	>300	Rejected/47
Example 10	Silicon oxide	2	0.5	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected/66	>300	Rejected/47
Example 11	Titanium dioxide	0.56	0.5	90/10	15	30	0.32	Calcium (40)	0.3	>300	Rejected/60	>300	Rejected/37
Example 13	Titanium dioxide	0.56	0.5	85/15	20	0.8	16	Cobalt (40)	0.46	>300	Rejected/65	>300	Rejected/35
Example 14	Titanium dioxide	0.56	0.5	90/10	17	10	0.22	Cobalt (180)	0.12	>300	Rejected/61	>300	Rejected/42